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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,213

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Fang-Chen Cheng

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EXAMINER

NGUYEN, TUAN HOANG

ART UNIT

PAPER NUMBER

2618

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/643,213	Applicant(s) CHENG ET AL.	
	Examiner TUAN H. NGUYEN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) 1,3, and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 4-9, and 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 06/17/2008 with respect to claims 2, 4-9, and 11-22 have been considered but are moot in view of the new ground(s) of rejection.
2. Claims 1, 3, and 10 canceled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 9, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoki et al. (US PAT. 6,480,526 hereinafter, "Shoki") in view of Sher et al. (US PUB. 2004/0010623 hereinafter, "Sher").

Consider claims 2, 9, and 16, Shoki teaches a method for controlling a flow of information, comprising: receiving, at a base station, at least two signals from at least two user equipment, each signal requesting to transmit information from the

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corresponding user equipment to the base station (col. 4 lines 2-14 and col. 7 line 63 through col. 8 line 5); determining at the base station and based on said at least two received signals, at least one relative delay between signals transmitted by at least two user equipment (col. 4 lines 2-14 and col. 7 line 63 through col. 8 line 5); determining a time at which the information is permitted to be transmitted by each of at least two user equipment based on the relative delay (col. 5 lines 18-26).

Shoki does not explicitly show that transmitting signals to each of at least two user equipment each signal identifying the time at which information is permitted to be transmitted from the corresponding user equipment to the base station; and transmitting a synchronizing signal, and wherein transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted.

In the same field of endeavor, Sher teaches transmitting signals to each of at least two user equipment each signal identifying the time at which information is permitted to be transmitted from the corresponding user equipment to the base station (page 3 [0031]); and transmitting a synchronizing signal, and wherein transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted (page 3 [0034-0037]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, transmitting signals to each of at least two user

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equipment each signal identifying the time at which information is permitted to be transmitted from the corresponding user equipment to the base station; and transmitting a synchronizing signal, and wherein transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted, as taught by Sher, in order for reducing the access-delay and transmission latency in a system where a network terminal terminates to a network over a transmission media.

Consider claim 17, Sher teaches a method for controlling the flow of information between a user and a base station, comprising: transmitting a signal from the user requesting permission from the base station to transmit information (page 4 [0044]); determining at least one relative delay between signals transmitted to the base station by the user and at least one other user (pages 3 and 4 [0039-0040]); determining a time at which the user is to transmit the information to the base station, wherein the determined time is a function of the relative delay (pages 3 and 4 [0039-0040]).

Consider claim 17, Shoki teaches a method for controlling a flow of information between a user and a base station, comprising: transmitting a signal from the user requesting permission from the base station to transmit information (col. 4 lines 2-14 and col. 7 line 63 through col. 8 line 5); determining, at the base station and based on the received signal, at least one relative delay between signals transmitted to the base

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station by the user and at least one other user (col. 4 lines 2-14 and col. 7 line 63 through col. 8 line 5); determining a time at which the user is to transmit the information to the base station, when the determined time is a function of the relative delay (col. 5 lines 18-26).

Shoki does not explicitly show that transmitting a signal to the user identifying the time at which information is permitted to be transmitted; transmitting a synchronizing signal to a user, wherein transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted; and transmitting the information from the user to the base station at the identified time.

In the same field of endeavor, Sher teaches transmitting a signal to the user identifying the time at which information is permitted to be transmitted (page 3 [0034-0037]); transmitting a synchronizing signal, and wherein transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted (page 3 [0034-0037]); and transmitting the information from the user to the base station at the identified time (page 3 [0031]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, transmitting a signal to the user identifying the time at which information is permitted to be transmitted; transmitting a synchronizing signal, and wherein transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying the time as a function of

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the synchronizing signal at which information is permitted to be transmitted; and transmitting the information from the user to the base station at the identified time, as taught by Sher, in order for reducing the access-delay and transmission latency in a system where a network terminal terminates to a network over a transmission media.

Consider claim 18, Sher further teaches receiving the information from the user at a first preselected time (pages 3 and 4 [0039-0040]); comparing the first preselected time with the identified time to determine the relative delay between the user and at least one other user (pages 3 and 4 [0039-0040]).

Consider claim 19, Sher teaches a method for controlling the flow of information between a user and a base station, comprising: receiving, at the user, a synchronizing signal from the base station (page 3 [0034-0037]); receiving a signal from the base station identifying a time relative to the synchronizing signal at which information is to be transmitted (page 5 [0051]); the time being determined based on a relative delay between signals transmitted to the base station by the user and at least one other user (page 3 [0034-0037]); and transmitting the information from the user to the base station at the identified time (page 3 [0031]).

Consider claim 19, Shoki teaches a method for controlling a flow of information, comprising: transmitting a signal from the user requesting permission from the base station to transmit information (col. 4 lines 2-14 and col. 7 line 63 through col. 8 line 5).

Shoki does not explicitly show that receiving, at the user, a synchronizing signal from the base station; receiving a signal from the base station identifying a time relative to the synchronizing signal at which information is to be transmitted, the time being determined, at the base station and based on the transmitted signal, based on a relative delay between signals transmitted to the base station by the user and at least one other user; and transmitting the information from the user to the base station at the identified time.

In the same field of endeavor, Sher teaches receiving, at the user, a synchronizing signal from the base station (page 3 [0034-0037]); receiving a signal from the base station identifying a time relative to the synchronizing signal at which information is to be transmitted, the time being determined, at the base station and based on the transmitted signal, based on a relative delay between signals transmitted to the base station by the user and at least one other user (page 3 [0034-0037]); and transmitting the information from the user to the base station at the identified time (page 3 [0031]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, receiving, at the user, a synchronizing signal from the base station; receiving a signal from the base station identifying a time relative to the synchronizing signal at which information is to be transmitted, the time being determined, at the base station and based on the transmitted signal, based on a relative delay between signals transmitted to the base station by the user and at least one other user; and transmitting the information from the user to the base station at the identified

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time, as taught by Sher, in order for reducing the access-delay and transmission latency in a system where a network terminal terminates to a network over a transmission media.

5. Claims 4, 8, 11-12, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoki in view of Sher and further in view of Leatherbury et al. (U.S. PUB. 2002/0136231 hereinafter, "Leatherbury").

Consider claims 4 and 11, Shoki and Sher in combination, fail to teach transmitting the signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted further comprises transmitting over a shared channel the signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted.

However, Leatherbury teaches transmitting the signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted further comprises transmitting over a shared channel the signal identifying the time as a function of the synchronizing signal at which information is permitted to be transmitted (page 1 [0008] and page 2 [0011]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Leatherbury into view of Shoki and Sher, in order to provide distributing information via existing and future communication networks that meets the increasing demand for broadband content.

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Consider claim 8, Leatherbury further teaches receiving the information at a first preselected time (page 2 [0016]); comparing the first preselected time with the identified time to determine the delay associated with the request to transmit information (page 3 [0018]).

Consider claim 12, Leatherbury further teaches a plurality of users, and wherein: transmitting the synchronizing signal further comprises transmitting the synchronizing signal over a shared channel to each of the plurality of users (page 1 [0008] and page 2 [0011]); and transmitting the signal identifying the time as a function of the synchronizing signal at which information is to be transmitted further comprises transmitting over the shared channel to the plurality of users a signal identifying a unique time, as a function of the synchronizing signal, at which information is to be transmitted (page 1 [0008] and page 2 [0011]).

Consider claim 20, Leatherbury further teaches receiving a signal from the base station identifying the time at which information is to be transmitted further comprises receiving a signal from the base station identifying a substantially unique time at which information is to be transmitted (page 11 [0072]).

Consider claim 21, Leatherbury further teaches receiving a signal from the base station identifying the time at which information is to be transmitted further comprises receiving a signal from the base station identifying a substantially unique frame

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associated with the synchronizing signal during which information is to be transmitted (page 11 [0074]).

Consider claim 22, Leatherbury further teaches receiving a synchronizing signal from the base station further comprises receiving a synchronizing signal from the base station over a shared channel (page 1 [0008] and page 2 [0011]).

6. Claims 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoki in view of Sher and further in view of Dutta (US PAT. 6,587,443).

Consider claims 5 and 13, Shoki and Sher in combination, fail to teach transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying a frame in which information is to be transmitted.

However, Dutta teaches transmitting a signal identifying the time at which information is to be transmitted further comprises transmitting a signal identifying a frame in which information is to be transmitted (col. 14 lines 32-60).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Dutta into view of Shoki and Sher, in order to distribute signal and message activities over all return channels of a channel group, by varying forward to return channel data rate ratios, and by reducing message transport

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delays with respect to prior art communication systems, based on message traffic over such channel group.

Consider claims 6 and 14, Dutta further teaches determining at least one relative delay between signals transmitted by at least two user equipment further comprises determining a propagation delay between signals transmitted by at least two user equipment (col. 12 lines 7-19).

Consider claims 7 and 15, Dutta further teaches determining at least one relative delay between signals transmitted by at least two user equipment further comprises determining a processing delay between signals transmitted by at least two user equipment (fig. 7 col. 22 lines 32-58).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571)272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571)272-7882882. The fax phone

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number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan Nguyen/
Examiner
Art Unit 2618

/Nay A. Maung/
Supervisory Patent Examiner, Art
Unit 2618